

MINUTES OF THE
MARICOPA ASSOCIATION OF GOVERNMENTS
AIR QUALITY TECHNICAL ADVISORY COMMITTEE MEETING

Thursday, October 22, 2015

MAG Office

Phoenix, Arizona

MEMBERS ATTENDING

Tim Conner, Scottsdale, Chairman	* Jeanette Fish, Maricopa County Farm Bureau
Jamie McCullough, El Mirage, Vice Chair	Steve Trussell, Arizona Rock Products
Drew Bryck, Avondale	Association
Susan Avans for Robert van den Akker, Buckeye	* Claudia Whitehead, Greater Phoenix Chamber
* Jim Weiss, Chandler	of Commerce
Jessica Koberna, Gilbert	Amanda McGennis, Associated General
Megan Sheldon, Glendale	Contractors
* Cato Esquivel, Goodyear	* Spencer Kamps, Homebuilders Association of
# Kazi Haque, Maricopa	Central Arizona
Greg Edwards, Mesa	* Mannie Carpenter, Valley Forward
William Mattingly, Peoria	Kai Umeda, University of Arizona Cooperative
Joe Gibbs for Joe Giudice, Phoenix	Extension
# Antonio DeLaCruz, Surprise	Beverly Chenausky, Arizona Department of
Oddvar Tveit, Tempe	Transportation
* Youngtown	# Eric Massey for Arizona Department of
Ramona Simpson, Queen Creek	Environmental Quality
# Walter Bouchard, American Lung Association of	* Environmental Protection Agency
Arizona	Hether Krause, Maricopa County Air Quality
Kristin Watt, Salt River Project	Department
* Rebecca Hudson-Nunez, Southwest Gas	Scott DiBiase, Pinal County
Corporation	* Michelle Wilson, Arizona Department of
* Michael Denby, Arizona Public Service Company	Weights and Measures
* Gina Grey, Western States Petroleum Association	@ Ed Stillings, Federal Highway Administration
* Robert Forrest, Valley Metro/RPTA	* Judi Nelson, Arizona State University
* Dave Berry, Arizona Motor Transport Association	Stan Belone, Salt River Pima-Maricopa Indian
	Community

*Members neither present nor represented by proxy.

#Participated via telephone conference call.

+Participated via video conference call.

@ Ex-Officio member, non-voting member.

OTHERS PRESENT

Lindy Bauer, Maricopa Association of Governments
Julie Hoffman, Maricopa Association of Governments
Matt Poppen, Maricopa Association of Governments
Kara Johnson, Maricopa Association of Governments
Dean Giles, Maricopa Association of Governments
Taejoo Shin, Maricopa Association of Governments
Amy St. Peter, Maricopa Association of Governments
Stephen Tate, Maricopa Association of Governments

Tom Savage, House of Representatives
Bob Downing, Maricopa County Air Quality
Department
Todd Williams, Michael Baker International
Joonwon Joo, Arizona Department of
Transportation
Heather Hodgman, City of Apache Junction
Philip Loftis, Maricopa County Department of
Transportation

1. Call to Order

A meeting of the Maricopa Association of Governments (MAG) Air Quality Technical Advisory Committee (AQTAC) was conducted on October 22, 2015. Tim Conner, City of Scottsdale, Chair, called the meeting to order at approximately 1:35 p.m. Eric Massey, Arizona Department of Environmental Quality; Antonio DeLaCruz, City of Surprise; Kazi Haque, City of Maricopa; Walter Bouchard, American Lung Association; and Tom Savage, House of Representatives, attended the meeting via telephone conference call.

Chair Conner indicated that copies of the handouts for the meeting are available. He noted for members attending through audio conference, the presentations for the meeting will be posted on the MAG website under Resources for the Committee agenda, whenever possible. If it is not possible to post them before the meeting, they will be posted after the meeting.

Chair Conner stated that Members of the Air Quality Technical Advisory Committee may attend the meeting by telephone conference call. When attending by audio conference please clearly speak your full name and organization when prompted. The record of who attended by telephone conference call is important for the minutes of the meeting. Also remember to mute your phone when not speaking. If your phone does not have a mute button, press Star (*) 6 to mute and Pound (#) 6 to unmute. For those present at the meeting, please make sure your microphone is turned on when speaking so those participating through audio conference can hear you.

2. Call to the Audience

Chair Conner stated that the Call to the Audience provides an opportunity for members of the public to address the Committee on items not scheduled on the agenda that fall under the jurisdiction of MAG, or on items on the agenda for discussion but not for action. Comment cards for those wishing to speak are available on the tables adjacent to the doorways inside the meeting room. Members of the public will be requested not to exceed a three minute time period for their comments. A total of 15 minutes will be provided for the Call to the Audience agenda item, unless the Committee requests an exception to this limit. Please note that those wishing to comment on action agenda items will be given an opportunity at the time the item is heard. Chair Conner noted that no public comment cards had been received.

3. Approval of the August 27, 2015 Meeting Minutes

The Committee reviewed the minutes from the August 27, 2015 meeting. Scott DiBiase, Pinal County, requested that the August 27, 2015 minutes be changed to show his attendance at the meeting through telephone conference call. William Mattingly, City of Peoria, moved and Mr. DiBiase seconded and the motion to approve the August 27, 2015 meeting minutes, with the correction, carried unanimously.

4. Evaluation of Proposed FY 2018, 2019, and 2020 CMAQ Projects for the FY 2017-2021 MAG TIP

Dean Giles, Maricopa Association of Governments, presented the evaluation of proposed Fiscal Year (FY) 2018, 2019, and 2020 Congestion Mitigation and Air Quality Improvement (CMAQ) Projects for the FY 2017-2021 MAG Transportation Improvement Program (TIP). He stated that

these projects would be included in the new TIP. The TIP is scheduled for completion in the Spring of 2016 with anticipated approval in June 2016. Mr. Giles noted that the Committee last reviewed an evaluation of proposed CMAQ Projects for FY 2015, 2016, and 2017 in October 2012.

Mr. Giles discussed the purpose of the CMAQ Program. The purpose is to fund transportation projects and programs that will contribute to attainment or maintenance of federal air quality standards for ozone, carbon monoxide (CO), and particulate matter. Following the Moving Ahead for Progress in the 21st Century (MAP-21), the Federal Highway Administration (FHWA) published Interim Program Guidance for the CMAQ Program on November 12, 2013. A fact sheet on the CMAQ Program has been included in the agenda materials. In accordance with the FHWA guidance, MAG has conducted an assessment of the projects to evaluate the emission reduction benefits and cost-effectiveness to better inform the selection of CMAQ projects.

Mr. Giles stated that on August 10, 2015 MAG issued a call for projects with applications due on September 21, 2015. The call for projects included: air quality projects (e.g. PM-10 Paving Unpaved Roads, PM-10 Certified Street Sweepers, and Trip Reduction and Rideshare Programs); Arterial Intelligent Transportation Systems (ITS) projects; and Bicycle and Pedestrian Projects. The PM-10 Certified Street Sweeper Projects for FY 2016 will be evaluated in agenda item five. Mr. Giles noted that the proposed PM-10 Paving Unpaved Road Projects will be evaluated under agenda item six. For this agenda item, the lump sum funding for PM-10 Certified Street Sweeper Projects for FY 2018, 2019, and 2020 will be evaluated.

Mr. Giles discussed funding. He stated that the funding level for air quality projects reflects the 14.6 percent of CMAQ funding that is allocated by the Regional Transportation Plan. An excerpt from the Regional Transportation Plan was included in Attachment D of the agenda materials. Mr. Giles indicated that there are no ITS projects listed for FY 2020 due to funding that was advanced in the early years. The full ITS Program will be funded with completion in FY 2018 and 2019.

Mr. Giles reported that MAG evaluated: 37 PM-10 Paving Unpaved Road Projects, PM-10 Street Sweeper Projects, and other Air Quality Projects; 32 ITS Projects; and 37 Bicycle and Pedestrian Projects. With the September 21, 2015 due date for the projects, MAG had a compressed time period to confirm project application data and evaluate the projects. The MAG ITS Committee has forwarded meeting notes from their October 7, 2015 meeting which are included in Attachment E. Meeting notes from the MAG Bicycle and Pedestrian Committee meeting on October 20, 2015 have also been provided to the Committee. Mr. Giles noted that the MAG Bicycle and Pedestrian Committee were not able to review all 37 Bicycle and Pedestrian Projects; the meeting notes include the portion of projects they were able to evaluate to date. The MAG Bicycle and Pedestrian Committee will continue their evaluation at their November 17, 2015 meeting.

Mr. Giles indicated that the application data for the CMAQ Projects is provided by the MAG member agencies. MAG applies the CMAQ methodologies, which were first published in 1999 and last updated in September 2011. A link to the CMAQ methodologies is available on the

MAG website at: http://www.azmag.gov/Documents/CMAQ_2011-04-05_Final-CMAQ-Methodologies_3-31-2011.pdf. Mr. Giles commented that MAG utilized the Environmental Protection Agency (EPA) MOVES2014 emissions model to estimate the project emission reductions for total organic gases (TOG), nitrogen oxide (NOx), and PM-10 in kilograms per day, and AP-42 to calculate fugitive dust emissions. He added that seasonal adjustments to TOG and NOx are made to account for the six month ozone season. Mr. Giles stated that a priority weight of one has been applied to TOG, NOx, and PM-10. However, PM-10 projects located within four miles of a PM-10 monitor received a priority weight of two. Since there have been no violations of the carbon monoxide (CO) standard since 1996, CO has a priority weight of zero.

Mr. Giles stated that results of the CMAQ project evaluations are sorted by cost-effectiveness in Attachment A. Air Quality, Bicycle and Pedestrian, and ITS Projects for FY 2018 are provided in tables one through three. Mr. Giles noted that Air Quality, Bicycle and Pedestrian, and ITS Projects for FY 2019 are provided in tables four through six. Air Quality and Bicycle and Pedestrian Projects for FY 2020 are provided in tables seven and eight.

Mr. Giles provided the schedule. In October and November, the MAG ITS Committee, the MAG Bicycle and Pedestrian Committee, and the MAG Street Committee will review the project applications. Mr. Giles indicated that the MAG Air Quality Technical Advisory Committee is requested to forward the CMAQ evaluation to the Transportation Review Committee (TRC) and modal committees for their use in evaluating projects. In November, the modal committees will continue the evaluation using the CMAQ evaluation and other methods to rank projects that will be forwarded to the TRC. In December, the MAG Transportation Review Committee will review the Federal Fund Priority Listing of Projects and TIP listings. Mr. Giles stated that it is anticipated that in January 2016 the MAG Management Committee may recommend, and the MAG Regional Council may approve the Federal Fund Priority Listing of Projects.

Mr. Giles stated that the Committee is requested to forward the evaluation of proposed FY 2018, 2019, and 2020 CMAQ projects for the FY 2017-2021 MAG Transportation Improvement Program to the MAG Transportation Review Committee and modal committees for use in prioritizing projects. The Committee is also requested to rank the Air Quality Projects in tables one, four, and seven to be forwarded to the MAG Transportation Review Committee.

Steve Trussell, Arizona Rock Products Association, complimented MAG staff on the preparation of the documentation for review. He inquired what is the connection between the project and emission reductions. Mr. Trussell noted the ranked emission reduction columns. He added that the Interim Program Guidance for the CMAQ Program was helpful. Mr. Trussell suggested an additional column that indicates which category the project is eligible. He commented that an explanation of how the project will reduce emissions would help demonstrate how the project has the listed emission reductions benefits.

Chair Conner asked Mr. Giles if there is a way to categorize the projects and provide additional information. Mr. Giles responded that all of the projects are eligible for CMAQ funding. He stated that ITS projects are often traffic signalization and coordination projects that decrease vehicle delay which reduce emissions. Bicycle and Pedestrian Projects generally reduce vehicle trips by promoting a non-motorized mode of transportation. Mr. Trussell indicated that he

appreciates Mr. Giles explanation. He suggested the addition of a column that indicates which category the project is under would be beneficial for understanding the details of the project. Lindy Bauer, Maricopa Association of Governments, replied that a column can be added to the tables to address how the project reduces emissions and the eligibility criteria. Mr. Trussell thanked MAG staff and noted that this is a suggestion.

Ed Stillings, Federal Highway Administration, inquired about locations on the City of Phoenix Bicycle and Pedestrian HAWK Signalized Crossing Program Project. He commented that a lot of these projects have gone through the Federal Highway Administration Transportation Alternatives Program (TAP). Mr. Giles replied that Phoenix is looking at multiple locations for the project. Mr. Giles noted the locations in the project application were utilized for the emission reductions in the table. He stated that he can follow up with Mr. Stillings on the locations for the HAWK Signalized Crossing Program Project.

Mr. Stillings clarified that the HAWK Project has locations specified. Mr. Giles responded yes.

Joe Gibbs, City of Phoenix, asked what the difference is between the Trip Reduction Program and the Travel Reduction Program. Mr. Giles replied that MAG has a contract with the Maricopa County Air Quality Department for the Trip Reduction Program. He added that the Valley Metro Regional Rideshare and Telework Program encourages regionwide alternative transportation use. Mr. Giles indicated that MAG also has a contract with the Arizona Department of Administration for the Travel Reduction Program to work with state agencies on reducing single occupancy vehicle trips.

Chair Conner inquired if there is a motion needed to forward the evaluation to the MAG Transportation Review Committee. Ms. Bauer responded yes the Committee is requested to forward the evaluation and the Air Quality Projects rankings to the MAG Transportation Review Committee. Mr. Gibbs moved and Mr. Mattingly seconded, and the motion to forward the evaluation of proposed FY 2018, 2019, and 2020 CMAQ projects for the FY 2017-2021 MAG Transportation Improvement Program to the MAG Transportation Review Committee and modal committees for use in prioritizing projects and rank the Air Quality Projects to be forwarded to the MAG Transportation Review Committee, carried unanimously.

5. Evaluation of Proposed PM-10 Certified Street Sweeper Projects for FY 2016 CMAQ Funding

Mr. Giles presented the evaluation of proposed PM-10 Certified Street Sweeper Projects for FY 2016 Congestion Mitigation and Air Quality Improvement Funding. Overall nine projects requesting \$2.1 million were submitted by the project deadline of September 21, 2015. The listing of projects is provided in Attachment A of the agenda materials. A total of \$1.53 million is available through the FY 2016 Unified Planning Work Program and the FY 2014-2018 MAG Transportation Improvement Program. A minimum local cash match of 5.7 percent is required.

Mr. Giles indicated that under the MAG Federal Fund Programming Guidelines and Procedures, the MAG Street Committee is to review the applications and project data. The MAG Street Committee conducted a technical review of the projects at their October 13, 2015 meeting. Mr. Giles noted that comments made by the MAG Street Committee are provided in Attachment B of the agenda materials. MAG staff applied the CMAQ methodologies using the data supplied by the project applications for the list of proposed projects in Attachment A. Mr. Giles indicated

that six projects could be funded with the CMAQ funds currently available: Peoria #1; Phoenix #1; Phoenix #2; Mesa; Scottsdale; Apache Junction; and partial funding is available for the Peoria #2 project. He stated that the list of prioritized street sweepers is to be retained should additional CMAQ funding become available during the MAG TIP closeout process or other funding is received by the region.

Mr. Giles stated that the MAG AQTAC is requested to recommend a prioritized list of proposed PM-10 Certified Street Sweeper Projects for FY 2016 CMAQ Funding to the MAG Management Committee and to retain the prioritized list should additional FY 2016 CMAQ funds become available. It is anticipated that the MAG Management Committee would consider the list of proposed PM-10 Certified Street Sweeper Projects at their meeting on November 18, 2015, followed by the MAG Regional Council on December 16, 2015.

Mr. Stillings mentioned that he wanted to discuss a City of Mesa project. He commented that narrow gauge street sweepers used to sweep trails or sidewalks would not be an eligible submittal. However, the Mesa project application proposes to utilize a narrow gauge sweeper on light rail crossings, roadways, and other areas that utilize a narrow gauge sweeper. Mr. Stillings added that this project is also an expansion of coverage that adds an additional sweeper instead of replacing a sweeper. If the project were to replace a sweeper with a narrow gauge sweeper, the sweeper would be sweeping less than a full size street sweeper. Mr. Stillings commented that the Mesa project is considered eligible. He indicated he wanted to share this information with the Committee for the future. Mr. Stillings discussed that other communities are interested in the narrow gauge sweeper, however the primary purpose is to focus on the reduction of PM-10 and PM-2.5. Chair Conner stated that it sounds like the City is trying to address new technologies in place.

Jessica Koberna, Town of Gilbert, inquired why the Mesa and Apache Junction projects have indicated no committed staff or equipment. Mr. Giles replied that the projects are either replacing an older certified street sweeper or expanding in which no additional operator is required. Mesa and Apache Junction are going to continue funding at current levels.

Ramona Simpson, Town of Queen Creek, asked if the wording of that question can be modified to be more clear for more consistent answers. She indicated that perhaps a project application may use current staff in which a new operator is not required. Ms. Simpson indicated that clear answers will help avoid negative reflections on the project. She commented that there are separate questions: are current staff going to be used for the project or are additional staff required.

Megan Sheldon, City of Glendale, inquired about the daily emission reductions for the Glendale project. Mr. Giles responded that the Glendale project is to increase street sweeping frequency. He added that the increase in frequency was for residential and collector streets, not sweeping arterial roadways which remained at 30 days. The increase in frequency for sweeping residential and collector streets will go from every 90 days to 60 days which accounts for the smaller reduction in daily emissions.

Ms. Simpson asked if more weight is given to projects that sweep near air quality monitor sites. Mr. Giles replied yes. Ms. Simpson inquired about the Chandler project that would replace an

old sweeper that would be sweeping near an air quality monitoring site. She mentioned that the Committee would want good sweeping frequency near the monitors. Mr. Giles responded that all of the street sweeping projects on the list are sweeping within four miles of a PM-10 air quality monitor. Mr. Giles indicated that the City of Chandler project is only sweeping arterial streets with 39 lane miles swept every 14 days. He noted that the application for this sweeper noted that sweeping would not be occurring on collector or residential streets and this would account for a lower emission reduction.

Chair Conner noted that in Attachment B, the #13 air quality monitor is noted in the project for the City of Chandler and the City of Scottsdale. He stated that this is likely a typing error. Mr. Giles replied that it is a typing error. Chair Conner requested that the typing error be fixed before forwarding onto the MAG Management Committee.

The Committee reviewed the prioritized list of proposed PM-10 Certified Street Sweeper Projects for FY 2016 CMAQ funding. Mr. Mattingly moved and Ms. Simpson seconded, and the motion to recommend a prioritized list of Proposed PM-10 Certified Street Sweeper Projects for FY 2016 CMAQ funding to the MAG Management Committee and to retain the prioritized list for any additional FY 2016 CMAQ funds that may become available due to closeout or additional funding received by the region, carried unanimously.

6. Evaluation of Proposed PM-10 Paving Unpaved Road Projects for FY 2018, 2019, and 2020 CMAQ Funding

Ms. Bauer stated that MAG staff was awaiting additional information on these projects which is why this agenda item was mailed separately. She added that a few additional changes will be discussed under this agenda item. Mr. Giles provided an update on the evaluation of proposed PM-10 Paving Unpaved Road Projects for FY 2018, 2019, and 2020 CMAQ Funding. He indicated that revised materials were provided to the Committee, at the their place, to reflect that the \$1,569,630 Pinal County Midway Road Project is located in the Pinal County PM-2.5 nonattainment area. Mr. Giles stated that Midway Road falls on the boundary of the Pinal County PM-2.5 nonattainment area and the project is now located in tables C and D rather than tables A and B.

Mr. Giles reviewed the evaluation of proposed PM-10 Paving Unpaved Road Projects for FY 2018, 2019, and 2020 CMAQ funding based on emission reductions and cost-effectiveness. The deadline for project applications was September 21, 2015. In the Maricopa County PM-10 nonattainment area, ten paving unpaved road and alley paving projects were submitted requesting \$10.7 million. A total of \$12 million is available in CMAQ funding for Paving Unpaved Road Projects. Attachment A provides a ranking by cost-effectiveness and Attachment B provides a ranking by PM-10 emission reductions. In the past, the Committee has requested both tables be included for review.

Mr. Giles discussed the Pinal County PM-2.5 nonattainment area, six Paving Unpaved Road Projects were submitted requesting \$6.3 million in Federal CMAQ funding for PM-2.5. A total of \$2 million is available in CMAQ funding for PM-2.5. Attachment C provides a ranking by cost-effectiveness and Attachment D provides a ranking by PM-10 emission reductions. Mr. Giles presented a map of the Pinal County PM-2.5 nonattainment area.

Mr. Giles stated that under the MAG Federal Fund Programming Guidelines and Procedures, the MAG Street Committee is to review the project applications and data. The MAG Street Committee conducted a technical review of the projects at their October 13, 2015 meeting. Mr. Giles noted that comments made by the MAG Street Committee are provided in Attachment E of the agenda materials. MAG staff applied the CMAQ methodologies using the data supplied by the project applications. The weighted PM-10 emission reductions are displayed in kilograms per day and the cost-effectiveness is provided in dollars per metric ton. Mr. Giles indicated that for projects in the West Central Pinal PM-2.5 nonattainment area, the weighted PM-2.5 reductions are ten percent of the weighted PM-10 reductions.

Mr. Giles stated that the MAG AQTAC is requested to recommend a ranked list of proposed PM-10 Paving Unpaved Road Projects for FY 2018, 2019, and 2020 CMAQ Funding and forward to the MAG Transportation Review Committee.

Chair Conner inquired if it is the Committee's discretion to forward the ranked projects based on either cost-effectiveness or emission reductions. Mr. Giles replied yes, it is up to the Committee to make the determination. Chair Conner reported that the motion to recommend a ranked list of proposed PM-10 Paving Unpaved Road Projects is based on cost-effectiveness or PM-10 emission reductions.

Mr. Mattingly asked if ranking projects by cost-effectiveness is the traditional way of prioritization and the Committee also requested a ranking by PM-10 emission reductions for consideration. Mr. Giles replied yes. Mr. Mattingly clarified that the traditional way to prioritize projects is through cost-effectiveness, which in this example is Attachment A. Mr. Giles responded that is correct.

Mr. Mattingly suggested to recommend the cost-effectiveness ranked list of proposed PM-10 Paving Unpaved Road Projects. He indicated that it is beneficial to consider a PM-10 emission reductions ranked list, however it is more consistent to forward the list with cost-effectiveness as the prioritization. Committee Chair Conner stated that Attachments A and C are the lists ranked by cost-effectiveness. Mr. Mattingly moved and Mr. Tveit seconded, and the motion to recommend the cost-effectiveness ranked Proposed PM-10 Paving Unpaved Road Projects for FY 2018, 2019, and 2020 CMAQ funding and forward to the MAG Transportation Review Committee, carried unanimously.

7. EPA Approval of the MAG 2014 Eight-Hour Ozone Plan-Submittal of Marginal Area Requirements

Ms. Bauer discussed the Environmental Protection Agency approval of the MAG 2014 Eight-Hour Ozone Plan - Submittal of Marginal Area Requirements for the 2008 eight hour ozone standard of 0.075 parts per million. She stated that the Federal Register notice approving the MAG 2014 Eight-Hour Ozone Plan - Submittal of Marginal Area Requirements was included in the agenda materials. The Plan was approved despite the fact that the area will be reclassified as a Moderate Area for the 2008 eight-hour ozone standard. The Plan did not require an attainment demonstration; EPA assumed that all Marginal Areas would come into compliance by the December 31, 2015 attainment date. However, on December 23, 2014 a court case changed the attainment date to June 20, 2015. Ms. Bauer indicated that when the attainment date is the middle of the ozone season, the area needs to be in attainment in the ozone season prior

to that year. She stated that the region did not attain the standard in the prior year ozone season (2014). The MAG 2014 Eight-Hour Ozone Plan for the 0.075 parts per million standard did not include additional control measures. Ms. Bauer commented that the EPA approval is good news for the region.

8. New Strengthened Ozone Standard

Ms. Bauer presented the new strengthened ozone standard released by the Environmental Protection Agency on October 1, 2015. She indicated that ground level ozone is a summer air pollution problem. Ozone is not directly emitted into the atmosphere, rather it is formed through a chemical reaction between volatile organic compounds (VOC) and NO_x in the presence of sunlight and high temperatures. Ms. Bauer stated that as air moves across the valley, this chemical reaction may occur to form ozone.

Ms. Bauer discussed the sources of ozone. She mentioned the draft 2011 ozone season-day VOC emissions in the Maricopa nonattainment area. She noted that biogenics, natural vegetation such as trees and plants, is the largest category at 58.5 percent. Ms. Bauer indicated that a question had been asked at a previous meeting by Avondale regarding salt cedar trees. She stated that salt cedars emit low levels of isoprenes. Trees that have a high level of isoprenes include: eucalyptus, oak, some pine trees, and spruce. Ms. Bauer indicated that MAG has a table that includes the emission factors for different types of vegetation. However, MAG does not advocate the removal of vegetation. She added that plants and vegetation help stabilize the soil which helps with PM-10. Ms. Bauer reported that onroad sources, including cars and trucks, are 12.3 percent of the emissions. Nonroad sources make up 9.8 percent, which include: commercial; industrial; construction; mining; lawn and garden; farm and recreational equipment; aircraft; and locomotives. Area sources make up 19 percent of the VOC emissions; area sources include the following: solvents and coatings use; fuel storage and transport; waste treatment and disposal; industrial and chemical processes; residential and industrial fuel combustion; and wildfires. The remaining 0.5 percent are point sources, which are industrial, manufacturing and electrical power generating facilities.

Ms. Bauer discussed NO_x emissions. The draft 2011 ozone season-day NO_x emissions in the Maricopa nonattainment area include the following: 60.9 percent are onroad sources; 28.5 percent are nonroad; 6.3 percent are area sources; 3.0 percent are point sources; and 1.2 percent are biogenic sources. Ms. Bauer noted that while biogenics is the largest source of VOC, it is the smallest source of NO_x. The largest source of NO_x is onroad sources, which includes cars and trucks.

Ms. Bauer reported that EPA is required under the Clean Air Act to review the National Ambient Air Quality Standards every five years. EPA is assisted by a Clean Air Scientific Advisory Committee. On October 1, 2015, EPA signed a final notice to strengthen the eight-hour ozone standard from 0.075 to 0.070 ppm. Ms. Bauer indicated that the change may sound small, however it is difficult to achieve. She noted that the strengthened standard comes at an inopportune time with regard to economic development. The State, County, communities, and MAG are encouraging economic development to aid the region in recovering from the economic recession. According to the schedule, the State would submit designation recommendations for attainment and nonattainment boundaries to EPA by October 1, 2016. EPA would finalize the designations, classifications, and attainment dates by October 1, 2017 based upon 2014-2016

ozone monitoring data. The attainment dates will range from approximately 2020 to late 2037 based upon ozone levels in the area.

Ms. Bauer displayed trend data of the highest three-year average of the fourth high concentrations from 2000-2014. She noted the 1997 eight-hour ozone standard and the one-hour ozone standard have been met. The 2008 eight-hour ozone standard of 0.075 ppm has not yet been met, however 2015 would be a clean year, with the exclusion of a wildfire exceptional event. Ms. Bauer noted the 2015 eight-hour ozone standard of 0.070 ppm, as depicted on the table, has not yet been met.

Ms. Bauer presented an EPA map of counties measuring above the new 2015 ozone standard. She noted that nine out of ten counties in Arizona that measure for ozone would be out of compliance with the new standard.

Ms. Bauer discussed the EPA existing and proposed federal rules that will assist in attaining the ozone standard. She stated that most of the federal rules are designed to reduce emissions from vehicles, clean up fuels, and some rules reduce emissions from power plants and other combustion sources. The federal rules include: Requirements to Reduce Interstate Transport of Air Pollution; Regional Haze Regulations; Mercury and Air Toxics Standards; Clean Power Plan; Tier 3 Vehicle Emissions and Fuel Standards; Light-duty Vehicle Tier 2 Rule; Mobile Source Air Toxics Rule; Light-Duty Greenhouse Gas Corporate Average Fuel Efficiency Standards; Heavy-duty/Vehicle Greenhouse Gas Rule; Reciprocating Internal Combustion Engines NESHAP; and Industrial/Commercial/Institutional Boilers and Process Heaters MACT and Amendments. EPA analysis indicates that these rules will help the vast majority of the counties in the United States to meet the standard by 2025 without additional actions. Ms. Bauer displayed an EPA map of counties projected to measure ozone above the new 2015 ozone standard in 2025. She noted that Arizona is projected to be in compliance.

Ms. Bauer discussed issues with the new ozone standard. She commented that transport from other countries, such as China, Mexico, and Canada, impacts the region. Ms. Bauer mentioned that EPA is working with other countries on reducing transport emissions, however the region cannot control transport. Transport impacts the region by contributing to background ozone concentrations. The local emissions from the nonattainment area are then added to the background ozone. Additionally, transport within the United States impacts the region.

Ms. Bauer presented transport slides from May 29th, 30th, and 31st, 2011. She noted that on May 29th an ozone plume is visible in California. On May 30th, the ozone plume in California combines with an ozone plume from Mexico. Ms. Bauer indicated that on May 31st the ozone plume makes its way over Arizona heading to the northeast. She indicated that ozone transport is a tough issue that the region cannot control because it is beyond our boundaries.

Ms. Bauer discussed ozone exceptional event issues. She indicated that MAG staff discussed the ozone exceptional event at the last meeting. Ms. Bauer displayed satellite imagery of the exceptional event in which the Lake Fire in San Bernardino is circled in red. She stated that the smoke from the fire is visible drifting over the Maricopa eight-hour ozone nonattainment area that caused exceedances of the ozone standard on June 20, 2015. MAG staff is working with the Arizona Department of Environmental Quality (ADEQ) and Maricopa County on compiling

exceptional event documentation. Ms. Bauer commented that there is good documentation on the exceptional event and the wildfire should not count against the region.

Ms. Bauer discussed Maricopa eight-hour ozone nonattainment area boundary issues. She indicated that when EPA determines a boundary, their starting point is the Metropolitan Statistical Area. The Metropolitan Statistical Area would include all of Maricopa and Pinal County. The current Maricopa eight-hour ozone nonattainment area boundary is over 5,000 square miles. Ms. Bauer stated that Pinal County, according to EPA data, is not currently meeting the new ozone standard. Ms. Bauer noted that MAG staff is aiding Pinal County with their conformity analysis for the PM-10 and PM-2.5 nonattainment areas to ensure continuity with the transportation infrastructure. She stated that the Sun Corridor is a vital economic engine for the State. Ms. Bauer commented that these are some of the issues with the tightened standard and there may also be implications on conformity.

Ms. Bauer presented a graphic on the Clean Air Act ozone nonattainment area requirements by classification. She explained that areas such as Los Angeles would fall into the Extreme Area classification. For example, if an area was classified extreme, they would be required to fulfill all of the requirements on the chart. Ms. Bauer stated that if the region is in nonattainment, the hope is to be classified as a Marginal Area. Marginal Areas have the least amount of requirements where an attainment demonstration and a new conformity budget are not required.

Ms. Bauer discussed the major source threshold. If a region is in nonattainment for ozone, there is a major source threshold of 100 tons per year for a Marginal Area. Ms. Bauer explained that if a major source emits 100 tons per year, an offset is required for emissions with a 1.1:1 ratio. She stated that major sources would be required to lower emissions more than they are emitting which means tighter controls on business and industry. Ms. Bauer noted that major source businesses moving into the region or looking to expand would fall into the offset ratio requirements. Major source businesses moving into the area will look for businesses that have moved out to buy emission credits that will make it easier to locate in the nonattainment area. Maricopa County has indicated that there is not much in the emissions bank which makes it difficult to offset.

Ms. Bauer indicated that EPA is required to review the standard every five years, however the strengthened standard comes at an inopportune time with regard to economic development. She stated that MAG staff is working with ADEQ, the Maricopa County Air Quality Department, and the Arizona Department of Transportation on these issues with the new ozone standard. MAG is a member of the Western Regional Alliance which are a group of Metropolitan Planning Organizations that are concerned with the implications of the new ozone standard. Ms. Bauer stated that the MAG Management Committee recommended that MAG continue working with the Western Regional Alliance to determine ways to lessen the negative impacts of the new ozone standard.

9. EPA Withdrawal of the Direct Final Rule to Approve the Removal of Stage II Vapor at Gasoline Stations

Ms. Bauer provided an update on the EPA withdrawal of the direct final rule to approve the MAG 2014 State Implementation Plan Revision for the Removal of Stage II Vapor Recovery Controls in the Maricopa Eight-Hour Ozone Nonattainment Area. She stated that EPA made a

determination to remove the Stage II vapor nozzles at gasoline stations to avoid the disbenefit in 2018. The vehicle onboard refueling vapor recovery systems conflict with the nozzles that are in place. The direct final rule was published in the Federal Register on September 2, 2015.

Ms. Bauer discussed that EPA has since withdrawn the direct final rule to respond to adverse comments received. She indicated that the comments were made on the proposed approval action that was also published September 2, 2015. After the comments are addressed, it is anticipated that EPA will take final action.

10. EPA Approval of the MAG 2013 Carbon Monoxide Maintenance Plan

Ms. Bauer provided an update on the EPA approval of the MAG 2013 Carbon Monoxide Maintenance Plan. She stated that this is good news for the region. Ms. Bauer indicated that this is the second CO maintenance plan that EPA has approved. The approval indicates the standard will be maintained through 2025. Ms. Bauer discussed that the region has experienced great success with CO. Many years ago, the region would violate the standard over 100 days per year, however now the region is 67 percent below the standard. She indicated that maintaining the standard is attributed to the efforts put forth by the region.

11 Call for Future Agenda Items

Chair Conner indicated that the next meeting of the Committee has been scheduled for Thursday, December 3, 2015 at 1:30 p.m. He requested suggestions for future agenda items. With no further comments, the meeting was adjourned at approximately 2:35 p.m.